INDEX

PAGE

Abstracts of papers before reading, . 14
Adaptation, ... 189
Adder, secretion of poison in the, . 235
Agassiz, Alex., ... 103
Aikman, C. M., "Milk, its Nature and Composition" (*Review*), . . . 473
Alpine Paradise, an, ... 346
American Mammalogy, ... 355
Amœba in Man, a new, ... 64
Animal Development, principles of, by J. Beard, ... 131
,, Symmetry, by A. T. Masterman, ... 50
Animals and Plants, mimetic resemblances in, by G. Henslow . . 121
Annelids, a recent research on the epitokous forms of, by W. C. M'Intosh, ... 375
Antherozoids in gymnosperms . . 270
Aphodiinae, the anal glands of, by L. Bordas, ... 458
Aplysiopurpurin, ... 459
Awdrey, W., "Early Chapters in Science" (*Review*), ... 470

Bailey, L. H., "Sketch of the Evolution of our Native Fruits" (*Review*), . 403
,, "Principles of Agriculture" (*Review*), . 407
Baldwin, J. M., "The Story of the Mind" (*Review*), ... 474
Bats in Burmese caves, ... 259
,, and Black Grouse in Ireland, . 258
Beard, J., on Thymus, ... 269
,, on Principles of Animal Development, . . 131
Bees and the Origin of Flowers, by G. W. Bulman, . . . 128
,, and Flowers, ... 413
Berry, A., "Short History of Astronomy" (*Review*), ... 471
Bibliography of Zoology, ... 190
Binding, a fine taste in, ... 269
Biological Analogy and Speech Development, by H. C. Wyld, . 46
,, "Lectures delivered at the Marine Biological Laboratory of Wood's Holl" (*Review*), . . 241
Biology of Cock-fighting, . . . 1
,, the Victorian era, . . 9

PAGE

Bipolar Hypothesis, the, ... 348
Bird-catching Spiders, ... 330
Birds and their surroundings, . . 2
Bivalve Mollusca, eyes in, . . . 6
Bombardier Beetles, the artillery of the, 423
Bonney, T. G., "Volcanoes" (*Review*), 463
Books and the Customs, ... 3
Bordas, L., Anal Glands of the Aphodiinae, ... 458
Borneo, foraminifera of, ... 350
Brain, a parasite of the, ... 236
,, evolution of the, ... 151
,, What is a? 150
Brandt, K., The Metabolism of the Sea, ... 343
Broad Path, the, ... 271
Brush, G. J., and Penfield, S. L., "Determinative Mineralogy and Blowpipe Analysis" (*Review*), . . 245
Buckman, S. S., The Development of Rivers; and particularly the Genesis of the Severn, . . . 273
Bulman, G. P., A Note on Telegony, Xenia, and "Hybrid Oology," . 392
Bulman, G. W., Bees and the Origin of Flowers, ... 128
Burmese Caves, bats in, ... 259
Butterflies, classification of, . . . 79
,, Colours and Pigments of, by M. I. Newbigin, ... 138

Campbell, D. H., "On the Evolution of Plants" (*Review*), ... 473
Cape of Good Hope Geological Commission, Department of Agriculture, Reports for 1896 and 1897" (*Review*), 469
Card, F. W., "Bush Fruits" (*Review*), 244
Castrating Caterpillars, ... 235
Caullery and Mesnil, "Les formes épitoques des cirratuliens" (*Review*), 375
Centipedes, poison of, ... 235
Chalazogams, ... 187
Chinch Bug, the, ... 94
Ciliary Movement, ... 350
Coccospheres, ... 106
Cole, G. A. J., "Aids in Practical Geology" (*Review*) . . . 70
Colour Vision, a theory of, . . . 188
Colours of Cowries, ... 99
Congo, natural history of the, . . 101
Conjugation, partial and total, . . 395
Copepods, North American freshwater 8

PAGE
Correspondence, . 78, 166, 250, 412
Corundum of India, ... 13
Cowries, colours of, ... 99
Cretaceous Gryphaeas, . . . 6
Crop of birds, ... 395
Cunningham, J. T., Professor Weldon's Evidence of the Operation of Natural Selection, . . . 38
Cycadofilices, ... 263

Danish Boulders, ... 106
Dannemann, "Grundriss einer Geschichte der Naturwissenschaften" (*Review*), ... 464
Davenport, C. B., "Experimental Morphology," part ii. (*Review*), . 466
Decapitation of Ants, ... 150
Delicate Operation, a, ... 2
Dendrites, changes in the, . . 151
Development, principles of, . . 385
,, of Lepidosiren, . . 432
Dimorphism, ... 330
Distribution and morphology, . . 93

Early Life on Earth, ... 184
Earwig, the transformations of an, . 192
Eggs, ventilation of, ... 459
Elsden, J. V., "Applied Geology" (*Review*), ... 406
Embryology, experimental, . . 236
Endowment of research, . . . 177
Enterochlorophyll, ... 459
Entomology, ... 178, 424
Entomostracan, a warlike, . . . 7
Eocene Sharks and Skates, . . 349
Essex and East Anglia, . . . 427
,, Museum of Natural History, . 428
Evans, A. H., "Birds" (*Review*) . 400
Evolution and the Question of Chance, by F. W. Headley, . 357
,, a half century of, . . 9
,, philosophy of, ... 5
Ewart, J. C., The Penycuik Experiments, ... 203
Eyes in Bivalve Mollusca, . . 6

Fishing at the Cape of Good Hope, . 431
Fison, A. H., "Recent Advances in Astronomy" (*Review*), . . . 246
Flame Cells in Rotifera, . . . 355
Flowers, the red and blue colouring matters of, by P. Q. Keegan, . . 143
Foraminifera of Borneo, . . . 350
,, recent literature on the, 161
Formation of a Human Race, . . 95
Fossil Plants, some recent work on the anatomy of, by A. J. Maslen, . 364
Fossils, a shower of, ... 151
Freaks, ... 107
Fresh-water Protozoa, ... 329
,, Biological Stations, by D. J. Scourfield, . . 450
Frogs, parental care in, . . . 236
Frost, selective action of, . . . 330
Funafuti: the Study of a Coral Atoll, by W. J. Sollas, ... 17

Geikie, J., "Earth Sculpture" (*Review*), ... 154
PAGE
Geologists' Kalendar, ... 243
Geotaxis in Animals, ... 329
Grafting Insects, ... 64
Great Auks in Ireland, ... 179

Haeckel, Ernst, and Hans Gadow, "The Last Link: Our Present Knowledge of the Descent of Man" (*Review*) 153
Halophytes 186
Hampson, G. F., "Catalogue of the Lepidoptera Phalaenae in the British Museum," vol. i. (*Review*), . . 237
Harting, J. E., "The Rabbit" (*Review*), ... 159
Hartog, Marcus, Weismann's "Regeneration," 455
Hastings, C. S., "Text-book of General Physics" (*Review*), . . . 472
Headley, F. W., Evolution and the Question of Chance, ... 357
Henslow, G., Mimetic Resemblances in Animals and Plants, . . . 121
Hermit-Crab and Sea-Anemone, . 260
Herrera, A. L., on Ciliary Movement, 350
,, Protoplasmic Currents and Vital Force, . 232
Hertwig, O., "Die zelle und die Gewebe" (*Review*), ... 152
Hill, R. T., and Vaughan, T. W., "The Lower Cretaceous Gryphaeas of the Texas Region" (*Review*), . 162
Holothuroids, respiratory trees of, . 64
Holothurians, genital organs of, . 459
Hörmann, Georg, "Studien über die Protoplasmaströmung bei den Characeen," . 12
,, ,, "Die Kontinuität der Atomverkettung" (*Review*), 471
Hull Club, ... 105
Human Race, formation of a, . . 95
Hybrid Oology, a note on, by G. P. Bulman, ... 392
Hybridism, ... 11, 203

Ichthyosaurus, the skin and fins of, . 3
Illustrations, the authorship of, . 166
Immunity, the evolution of, . . 102
India, the corundum of, . . . 13
Intercellular Bridges, ... 236
Irrelevant Generalities, ... 94

Jamaica, marine zoology in, . . 422
Japan, zoological notes from, . . 100
Jermyn Street Museum, . . . 353
Jones, T. R., The Great Glacial Moraine of Permian Age in South Africa, . 199

Kangaroo's Vocal Cords, the, . . 66
Keegan, P. Q., The Red and Blue Colouring Matters of Flowers, . 143
Keilhack, H., "Kalender für geologen, paläontologen und mineralogen" (*Review*) 243
Kirkes' "Handbook of Physiology," by W. D. Halliburton (*Review*), . 406
Kitchen-Middens, the discoverer of, . 264
Klebs, ... 15

PAGE

Korschelt and Heider, "Text-book of Embryology of Invertebrates," vol. ii. (*Review*) 468
Kuntze, the Case of Dr. Otto, . . 297

Labbé, A., "La Cytologie expérimentale" (*Review*), ... 161
Lake Tanganyika, the fishes of, . 100
Lamarck's Theories, the True Interpretation of: a Plea for their Reconsideration," by R. F. Licorish, . 290
Lamprey, respiration of the, . . 65
Lapworth, C., "Intermediate Text-Book of Geology" (*Review*) . . 334
Leguminosae, nodules of, . . . 341
Leiss, C., "Die Optischen Instrumente der Firma R. Fuess" (*Review*), . 466
Lepidosiren, development of, . . 433
Licorish, R. F., The True Interpretation of Lamarck's Theories: a Plea for their Reconsideration, . 290
Life, What is ? 262
Liverpool Biological Society, . . 9
Lorenz, A., "Lehrbuch der Gesammten wissenschaftlichen Genealogie" (*Review*) 70
Lovendal, E. A., "De Danske Barkbiller (Scolytidae et Platypodidae Danicae)" (*Review*), ... 67
Lowson, J. M., "Text-Book of Botany" (*Review*). 334

MacDonald, Arthur, "Emile Zola, a Study of his Personality," . . 261
M'Intosh, W. C., A Recent Research on Epitokous Forms of Annelids, . 375
,, ,, "The Resources of the Sea as shown in the Scientific Experiments to test the Effects of Trawling and of the Closure of certain Areas off the Scottish Shores" (*Review*). 397
Mackerel and its Variations, the, . 97
Maidan, J. H., The Prickly Pears in New South Wales, . . . 183
Malaria, ... 65
Malayan Archipelago, geology of the, 460
Mammals, New British, . . . 236
Man in the Beast, ... 433
Marine Stations, the functions of, . 186
,, Zoology in Jamaica, . . 422
Marshall, H. R., "Instinct and Reason" (*Review*), ... 238
Maslen, A. J., Some Recent Work on the Anatomy of Fossil Plants, 364
Masterman, A. T., "Animal Symmetry," 50
Mehnert, Ernst, "Biomechanik," (*Review*) 385
Mehnert's Principles of Development, by J. A. Thomson, . . 385
Mesozoic Mammals from Patagonia, . 268
Metabolism of the Sea, . . . 343
Mimetic Resemblances in Animals and Plants, by G. Henslow, . . 121
Mole's Eye, lens of the, . . . 151

PAGE

Mollusc, an ancient, ... 257
,, lack of discrimination in a, . 260
Monkey, chambered stomach in a, . 395
Monotremes, hairs of, . . . 235
Moraine, The Great Glacial, of Permian Age in South Africa, by T. R. Jones, ... 199
Morgan, Prof., on Mr. Herbert Spencer, 412
Mosquitoes, ... 104
,, and Malaria, ... 65
Moulting as a Means of Defence, . 341
Mud from Jerusalem, ... 64
Muscle, making of, ... 150
Mussel, pigmentation of the, . . 65

National Museums, photography in, 15
Natural History, the Study of, by J. Arthur Thomson, . . . 437
,, Selection, Professor Weldon's Evidence of the Operation of, by J. T. Cunningham, 38
Nature Study, ... 430
Neomylodon, the Patagonian Ground-Sloth, ... 265, 267
Nervous System, artificial formation of rudimentary, ... 80
Newbigin, M. I., Colours and Pigments of Butterflies, . 138
,, ,, "Colour in Nature" (*Review*), . . 242
News, . . . 81, 167, 251, 337, 414, 479
Nitragin and Nodules, ... 341
Nitsche, Dr. H., "Studien über Hirsche" (*Review*), . . . 244
Nucleus and Cytoplasm . . . 101

Obituaries, . 73, 164, 247, 335, 409, 476
William Guybon Atherstone, George James Allman, Carl Wilhelm von Guembel, G. H. Theodor Eimer, Henry Alleyne Nicholson, William Colenso, Thomas Hincks, William Rutherford, Sir John Struthers, Wilhelm Barnim Dames, Othniel Charles Marsh, Axel Theodor von Goës, Joseph Wolf, Sylvanus Hanley, Jabez Hogg, George Wallich, Heinrich Keipert, Franz von Hauer, Sir Frederick M'Coy.
Octopods, shells in, ... 460
Organism, the, and the State, . . 345
Ornithological Amenities . . . 421
Osborn, H. F., ... 156

Pagination 413
Palaeontology of Plants . . . 364
Parasites, poisons of, . . . 396
Parthenogenesis in Stick-Insect . 329
Patagonia, supposed mesozoic mammals from, ... 268
Patagonian Ground-Sloth, . . 265, 267
Pearl-Making 65
Pedipalpi and Solifugae, The Geographical Distribution of the Arachnida of the Orders, by R. I. Pocock, ... 213
Penycuik Experiments, the: an Appreciation, by J. Arthur Thomson 303

PAGE

Philosophy of Evolution . . . 5
Phoronidea, systematic position of, . 182
Photographic Process Colour Printing, 103
Photography in National Museums . 15
Physiology of Reproduction . . 15
Pigeon, a record "homer," . . 460
Pigmentation of the Mussel . . 65
Plant Associations, on the Study of, by Robert Smith . . . 109
,, Embryology 356
Plants, sensitive protoplasm in, . 12
Plymouth Laboratory, . . . 98
Pocock, R. I., The Geographical Distribution of the Arachnida of the Orders Pedipalpi and Solifugae . 213
Poisons of Parasites 396
Prickly-Pears on the War-Path . . 183
Protoplasmic Currents and Vital Force, by A. L. Herrera 232
Pterygotus at Melbourne . . . 460
Publication, What constitutes, . 264
Pulmonary Ganglia 395
Pure Science 1

Radiolaria in Devonian Rocks . . 349
Regeneration and Development . 347
,, Facts and Interpretations, by August Weismann . . 305
,, in Earthworm . . 345
,, in Starfishes . . 346
,, in Tubifex, . . . 329
,, and Temperature, . 395
Reibmayr, A., "Inzucht und Vermischung," . . 95
,, "Die Immunisirung der Familien, . 102
Reproduction, physiology of, . . 15
Respiratory Trees of Holothuroids, . 64
Reversion, ... 203
Revolving Alga, new species of, . 13
Rhabdospheres, ... 106
Rivers, The Development of, and particularly the Genesis of the Severn, by S. S. Buckman, . . . 273
Robber Ant, detection of a, . . 330
Rock Structures, ... 396
Rotifera, flame cells in, . . . 355
Royal Society's Conversazione, . . 425
Russell, I. C., "River Development as Illustrated by the Rivers of North America" (*Review*), . . . 332

Salmon, Do they feed in fresh water? 96
Salt-developed Succulence, . . 186
San José Scale, the, ... 7
Saunders, H. P., "Bibliography of South African Geology" (*Review*), . 7
Schimper, A. F. W., "Pflanzen-Geographie auf physiologischer Grundlage" (*Review*), ... 402
Science and Literary Style, . . 353
Scourfield, D. J., Fresh-Water Biological Stations: America's Example, ... 450
Sea, the metabolism of the, . . 343
Sea-Anemone and Hermit-Crab, . 260
,, variation in a, . 12, 108
Sea-Fish Hatching, ... 351
Semon, R. "In the Australian Bush and on the Coast of the Coral Sea" (*Review*), ... 331
Sensitive Protoplasm in Plants, . 12
Serials, Reviews of, 71, 163, 246, 407, 474
Servia, biological literature of, . . 161
Sex, a problem of, ... 66
Sharpe, R. Bowdler, "Wonders of the Bird World" (*Review*), . . . 405
Shells in Octopods, ... 460
Slight Misunderstanding, a, . . 14
Smith, G. A., "Life of Henry Drummond" (*Review*), . 155
,, Robert, On the Study of Plant Associations, . . . 109
Snake striking the Eye, . . . 66
Sollas, W. J., Funafuti: the study of a Coral Atoll, ... 17
Speech-Development and Biological Analogy, by H. C. Wyld, . . 46
Spencer, Baldwin, and Gillen, F. T., "The Native Tribes of Central Australia" (*Review*), . . . 461
Sprengel, J. W., "Zweckmässigkeit und Anpassung," 189
Spines, ... 4
Spitta, E. J., "Photo-Micrography" (*Review*), ... 244
Starfishes, regeneration in, . . 346
Strasser, H., "Regeneration und Entwicklung," 347
Submarine Photography, . . . 396
Swaziland, stone implements from, . 106
Swim-Bladder, uses of the, . . 150
Symphily, ... 352
Syncytia in Development, . . . 65

Tail in place of a Head, . . . 345
Talbot, E. S., Degeneracy, . . 14
Telegony, ... 10, 166, 203
,, Xenia and "Hybrid Oology," by G. P. Bulman, ... 392
Temperature and Regeneration, . 395
Terminologic Transgressions, . . 183
Terminology, ... 297
Testicle, a tooth in a, . . . 460
Tetradium, ... 423
Thompson, D'Arcy W., Bipolar Hypothesis, ... 348
Thomson, J. A., Mehnert's Principles of Development, . 385
,, ,, The Penycuik Experiments: An Appreciation, . 203
,, ,, "The Science of Life" (*Review*), . 404
,, ,, The Study of Natural History, . . 437
Thorny Subject, a, ... 4
Thymus, comparative embryology of, 395
,, the true function of the, . 269
Tick Fever, inoculation for, . . 235
Todd, D. P., "A New Astronomy" (*Review*), ... 160
Trilobite, a decrepit, . . . 7
Trivandrum, the museum and gardens of, ... 190
Tubifex, regeneration in, . . 329
Turtle, the shell of a, . . . 235

PAGE

Universities, local colour in, . . 342

Vaccination, ... 78
Variation, . . 97, 107, 108, 357
Variations, classification of, . . 342
Vegetable Animation, by J. H. Wilson, 193
Verworn, Max, "General Physiology" (*Review*), ... 465
Vines, S. H., "Elementary Text-book of Botany" (*Review*), . . . 69
Voorhees, E. B., "Fertilizers" (*Review*), ... 245

Wallace, R. H., "White Cattle" (*Review*), ... 239
Weber, Max, "Studien über Säugethiere" (*Review*), ... 240
Weir, J., "The Dawn of Reason" (*Review*), ... 433
Weismann, A., Regeneration: Facts and Interpretations, ... 305
,, "Regeneration," by Marcus Hartog, . . 455
Weismannism, ... 14
Weismann's Position, more misunderstandings of, ... 108
Weka Rail and Snow-Goose, . . 396

PAGE

Weldon's Evidence of the Operation of Natural Selection, by J. T. Cunningham, ... 38
Welwitsch's Collection, ... 354
Wettstein, Dr., "Grundzüge der geographisch-morphologischen methode der Pflanzensystematik," . 93
Whelk's Egg, ... 131
Whip Snake, note on the long-snouted, 66
Willey, A., "Zoological Results" (*Review*), ... 403
Wilson, J. H., Vegetable Animation, 193
Witch's Milk, ... 150
Woodward, A. S., "Outlines of Vertebrate Palaeontology" (*Review*) . 156
Worcester, D. C., "The Philippine Islands and their People" (*Review*), 238
Wyld, H. C., Biological Analogy and Speech-Development, . . . 47

Xenia, a note on, by G. P. Bulman, . 392

Yeast, ... 180

Zebras, ... 203
Zola, ... 261
Zoological Notes from Japan, . . 100
Zoology, bibliography of, . . . 190